ABSTRACT

A solid phase synthetic method for preparing arylretinamides is provided. The method comprises reacting hexachloroacetone with a solvent-suspended resin-bound triphenylphosphine to provide a suspension comprising an activated chlorinating reagent; reacting retinoic acid with the activated chlorinating reagent to provide retinoyl chloride; adding pyridine and a select arylamine to the resulting mixture; and stirring the resulting mixture for a time and at a temperature sufficient for the select arylamine to react with the retinoyl chloride and provide the arylretinamide. Also provided, are select arylretinamides that can be prepared by the present method, and methods of using such arylretinamides to induce apoptosis in cancer cells.